

8th International Workshop on Characterization and Modeling of Memory Devices

Sept 28th- 29th 2017 | Politecnico di Milano, Campus Leonardo, Milano

SCHEDULE

Sept 28th | Aula Rogers, Via Ampere 2

10.00 a.m. Registration

10.30 Welcome

Stefano **Tubaro**, Director of DEIB (Dipartimento di Elettronica, Informazione e Bioingegneria), Politecnico di Milano

10.40 a.m. 1st session: Plenary Talks

10.40 *Semiconductor Memories: Recent Trends and Possible Evolution* - Pierre **Fazan**, Micron Technology - Belgium

11.05 *A Symbiotic Approach of Low-Power, Smart and Secure Technologies for the Hyperconnectivity Era* - Barbara **De Salvo**, Leti, Cea-Tech - France

11.50 *Non-volatile Memory Technologies: the Next Revolution in Computing* - Evangelos S. **Eleftheriou**, IBM Zurich - Switzerland

12.35 Lunch

2.00 p.m. 2nd session: Phase Change Materials and Memories

2.00 *First-Principles Non-Equilibrium Green Function (NEGF) Simulation Studies of Device Properties of Non-Volatile Memory Materials* - Yoshihiro **Asai**, AIST - Japan

2.35 *PC and Ovonic Switch in Chalcogenides: Material and Device Models for Applications* - Massimo **Rudan**, Università di Bologna - Italy

3.10 *The Temperature Dependence of Mobility in Liquid Chalcogenides* - Lindsay **Greer**, University of Cambridge - UK

3.45 *Defining Resonant Bonding: Why Are Phase Change Materials Unique?* - Jean Yves **Raty**, Université de Liege - France

4.20 p.m. Coffee Break and Discussion

Contacts

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Sept 29th | Aula Magna, P.zza Leonardo da Vinci 32

9.00 a.m. 3th session: Oxide RRAM and Flash

9.00 *Redox Processes and Transport of Mass and Charge in Nanoionic Memory Devices* - Ilia **Valov**, Forschungszentrum Jülich - Germany

9.35 *Formation of Volatile Filament in TaOx Threshold Switching Devices and their Scaling Behavior* - Marek **Skowronski**, Carnegie Mellon University - USA

10.10 *Evaluation of Charge Trapping in SONOS 3D NAND with Poly-Silicon and Alternative Channel Material* - Alexandre **Subirats**, IMEC - Belgium

10.45 Coffee Break

11.15 a.m. 4th session: Ferroelectrics and Ferromagnetics

11.15 *Negative Capacitance: Theory, Practice and Limitations* - Cheol Seong **Hwang**, Seoul National University - Korea

11.50 *Ferroelectric Tunneling Junctions for Memcomputing* - Riccardo **Bertacco**, Politecnico di Milano - Italy

12.25 *SOT - MRAM: an Ultra-Fast, Infinitely Endurant, Non-Volatile Memory* - Gilles **Gaudin**, CEA - France

1.00 p.m. Lunch & Adjourn

CLICK HERE TO REGISTER

More info available on the workshop website at www.iwcm2.eu



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